Roll No. ....

Total Pages : 03

BT-6/M-19
36113

COMPILER DESIGN
CSI:-302N

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. In addition to that attempt *four* more questions selecting exactly *one* question from each Unit.

Unit I

1. (a) What are regular expressions ? Write a regular expression for a language that accept all those strings in which the number of one's are odd and the number of zero's are even. 7½

   (b) What is Deterministic Finite Automation (DFA) ? How is it related to Regular expression ? 7½

2. Draw a flow diagram for showing the phases of a compiler and discuss each phase in detail. 15

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Unit II

3. (a) What is a data type ? Explain different data types in detail with examples.

   (b) What is the difference between while and do while loop ? 8+7=15

4. Briefly explain the following :
   (a) Instance variables and methods
   (b) Constructors
   (c) Use case diagrams 5+5+5=15

Unit III

5. (a) What is Polymorphism ? Discuss methodology for static and dynamic polymorphism.

   (b) Differentiate between aggregation, generalization and association. 8+7=15

6. Explore the best coding standards offered by industry. How codes are tuned and optimized ? 15

Unit IV

7. (a) Outline and explain the different symbolic notation used to draw ER diagram.

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(b) What is Normalization ? Discuss normal form based on full and partial function dependency.   8+7=15

(a) Why SQL is a query language ? Distinguish between delete. drop and truncate commands with example.

(b) What do you mean by views ? How views are created and dropped ?   8+7=15